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Draft Report of IBC on Traditional Medicine and its Ethical Implications

The International Bioethics Committee of UNESCO had included the issue of traditional medicine in its 2010-2011 work programme. A working group was established and entrusted with focusing on the ethical implications of these widespread and very different practices, avoiding duplication of the investigation carried out by other United Nations agencies and institutions. At the same time, internal as well as external sources were consulted and engaged.

On an internal basis, exchanges were held with the Member States of the Intergovernmental Bioethics Committee (IGBC) during the Joint Session of IBC and IGBC and the 7th session of IGBC, respectively held at UNESCO Headquarters in October 2010 and September 2011. At the 17th session of the IBC, in October 2010, experts from UNESCO's Natural Sciences and Culture sectors were invited to provide their input on the issue.

Externally, over 100 specialized research institutes worldwide were requested to fill out a questionnaire designed to collect information on traditional medical practices and especially on their institutional framework and legal regulation. Traditional health practitioners from different regions of the world were invited by the IBC to participate in its 18th session (held in Baku in May-June 2011) and enriched the discussion with their own points of view and experience.

The draft Report was further discussed by the members of IBC over the first months of 2012. This Report is presented to the 19th session of the IBC (UNESCO Headquarters, Paris, 11-12 September 2012) for further consideration.

It does not pretend to be exhaustive nor prescriptive and does not necessarily represent the views of the Member States of UNESCO.

DRAFT REPORT OF IBC ON
TRADITIONAL MEDICINE AND ITS ETHICAL IMPLICATIONS

TRADITIONAL MEDICINE AND ITS ETHICAL IMPLICATIONS

1. INTRODUCTION

Traditional medicine is at the crossroads of two different clusters of competences, values and responsibilities. It is a medicine, inasmuch as "traditional practitioners" – following the wording of the Declaration of Alma-Ata of 1978 – are to be included among the "health workers" who are called upon "to respond to the expressed health needs of the community", together with physicians, nurses, midwives, auxiliaries and community workers and on the basis of a suitable training. At the same time, traditional medicine – as it has been made explicit in the definition provided by the World Health Organization – aims at fulfilling this task of maintaining health, as well as preventing, diagnosing, and treating physical and mental illnesses, by the means of knowledge, skills and practices which are based "on the theories, beliefs and experiences indigenous to different cultures"[1]. Everyone – so reads Article 27 of *The Universal Declaration of Human Rights* – "has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits".

As medicine, the activity of traditional practitioners has to comply with the requirements which are appropriate to this practice, starting in the first place with those of safety, efficacy and quality. This system of knowledge, skills and practices is supposed to contribute to improve health outcomes, which include physical as well as mental and social well-being.

As a practice embedded in theories, beliefs and experiences which belong to different peoples, traditional medicine has been used in some communities for hundreds or even thousands of years. It can be perceived as a fundamental feature of their own identity and is often closely intertwined with lifestyles, cultural frameworks and social regulations, as well as domestic legislation.

The consideration by IBC of the ethical implications of traditional medicine is directly linked to UNESCO's mandate to promote cultural diversity. The Universal Declaration on Cultural Diversity (2001), the Convention for the Safeguarding of the Intangible Cultural Heritage (2003) and the Convention on Biological Diversity (2003), as well as the United Nations Declaration on the Rights of Indigenous peoples (2007) establish the parameters within which traditional medicine should be understood and dealt with. The task to address can be fulfilled if and only if two lines of arguments are taken into account. Two principles of the Universal Declaration on Bioethics and Human Rights, adopted by acclamation by the General Conference of UNESCO in 2005, are essentially at stake. On the one hand, there is the right of every human being to enjoy "the highest attainable standard of health" (Art. 14). On the other hand, there is the respect due to "cultural diversity and pluralism" (Art. 12), which includes "respect for traditional knowledge" (Art. 17).

These two principles must be upheld jointly and with the same force. However, it may happen that some differences arise in their application or that prioritization of one over the other becomes unavoidable in certain circumstances. Geographical diversity and variety is both an advantage and a challenge. The concept and practice of traditional medicine occur in different contexts, making unity of discourse and approach very difficult to attain. Despite this complexity, a broad-based approach should be promoted, because of the importance of traditional medicine in developing countries as well as its rapid growth in more developed ones, albeit with different roles. This approach requires not only a commitment to reaffirming the pivotal role of traditional knowledge worldwide, but also the capacity to provide some basic guidelines, in order to protect users and in order to avoid any possible risk of discrimination, and exploitation.

2. DIFFUSION, ECONOMIC IMPACT, PATTERNS OF REGULATION

[1] Traditional Medicine Factsheet. Geneva, World Health Organization, 2008. Available at: http://www.who.int/mediacentre/factsheets/fs134/en/

2.1 Traditional Knowledge

The huge variety and diversity which stems from the culture-specific dimension of traditional medicine means not only an absence of a homogeneous body of theories and practices, but also that those practices do not function solely according to the presence/absence of disease and symptom paradigm. Many traditional practices rely on a holistic approach to the human being within its broader environment and this characteristic feature is also reflected in the type of knowledge called on, the way it is said to have originated and the way it is used and transmitted. Traditional medical knowledge and its application can be highly codified and systematized, even institutionalized, with the consequence that its transmission is often taken over by State medical institutions or jointly by institutions and specialized families or lineages. In other countries, however, traditional medical knowledge remains small-scale, localized and rather informal, based on the experience accumulated by specific lineages of healers. It is often kept secret and mainly orally transmitted. It can also combine natural and supernatural resources and be considered as inherited through birth, gift or special revelation to selected initiated persons.

According to the figures provided by WHO in the Report on *The World Medicines Situation 2011*, between 70% and 95% of citizens in many developing countries use traditional medicine for the management of health and as a primary source of health care. This is explained, in most cases, either because they simply have no alternative choice, depending first and foremost on difficulty in gaining access to different and more expensive kinds of treatment, or because of cultural tradition. They turn to traditional medicine mainly because it is close at hand, easily affordable, readily available, cheap and consistent with indigenous cultures or ethnic group, though its effectiveness needs proving.

At the same time, however, the spread of traditional medicine in some industrialized countries is equally significant. In this case, the term is often used as a synonym for a large body of health care practices which have been set apart because they differ from the methods and treatments normally taught in medical faculties, as well as products which can be purchased under very different names, often without prescription and simply over-the-counter in shops other than pharmacies: for example, dietary supplements, functional foods, and self-medication products. Countries like Canada, France, Germany and Italy report that between 70% and 90% of their population have used traditional medicines[2], either because of the persuasion that this kind of treatment is more "natural" and therefore "danger-free", or as a supplement for chronic, debilitating or incurable diseases.

This spread is also a result of the wide array of "therapies" included in the concept of traditional medicine, ranging from the intake of medicines or manual therapies such as massages, to mental or spiritual therapies such as meditation or prayers, aimed at maintaining or restoring the equilibrium between physical, mental, environmental and cosmic influences on health. Many attempts to classify those therapies exist, and WHO has planned to release an international classification that would harmonize the data for clinical, epidemiological and statistical use. This classification would fill the gap between classifications of practices available in individual countries, which are based on internal criteria (methods of healing, type of ailment treated, identity of practitioners, etc.).

On the basis of the methods used for healing/maintaining health, therapies used in traditional medicine can be differentiated into the following categories:

- *Medication therapies* using herbal medicines and/or medicines based on animal parts and/or minerals;
- *Non-medication therapies* using manual (for example, massages), physical (for example, qigong, tai ji quan), mental (for example, meditation, hypnosis) and spiritual (magic-religious) therapies or a combination thereof (for example, yoga);
- *Mixed therapies* combining medication and non-medication therapies.

[2] *The World Medicines Situation 2011 – Traditional Medicines: Global Situation, Issues and Challenges*. Geneva, World Health Organization, 2011. p. 2

2.2 Economic Impact

The global market for the products of traditional medicine, especially those related to herbal medicine, has expanded significantly over the last decade and WHO estimates a rate of growth of between 5% and 18% per annum[3]. The figures are impressive. In China, traditional herbal products, which are the most lucrative component of traditional medicine, represent between 30% and 50% of the total consumption of medicines[4]. The retail sales volume is estimated at around $6 billion in Europe and $2.1 billion in Japan[5]. In the United States of America, the National Health Interview Survey carried out in 2007, which included a comprehensive survey of so-called complementary and alternative medicine (CAM) use by Americans, showed that approximately 38% of adults used CAM during the past 12 months, with an estimated global expenditure of $33.9 billion out-of-pocket. These figures accounted for approximately 1.5 percent of total health care expenditure in the United States of America, but this percentage represented 11.2 percent of out-of-pocket health care expenditure[6].

2.3 Patterns of Regulation

Conventional, allopathic or western medicine claims to rest on modern scientific knowledge, tends to be evidence-based and is one of the flagships of the experimental method. It tackles functional problems and gives pride of place to technological means to restore health, rather than dealing with illness as disorders holistically affecting a human being. Only qualified professionals may give decisive opinions (diagnosis, treatment, prevention and policies). It is with reference to this form of medicine, which usually understands itself as medicine *tout court*, that traditional practices are described as “complementary” or “parallel”. Therapies such as acupuncture and osteopathy may then be used in addition to scientifically recognized therapies in developed countries, but are seldom accepted as substitutes for them.

However, traditional medicine is still the conventional practice for many peoples, and has a long history, including western countries. This is why its essential features can best be identified by comparing it with medicine based on the development of modern sciences and technologies. However, even the reference to science-based versus culture-conditioned or modern versus traditional medicine has to be carefully considered. Traditional medicine itself has come out to be applicable far away from the environment where it was first engrained and susceptible to be further developed through research and new impulses. It is to be intended not as an expression of longing for the past, but as a candidate for integration in present and future medicine as a whole.

The essential point to make, is that the demand for effective drugs and medical treatments and services cannot be fulfilled through whatever kind of supply, once we assume – quoting Article 14 of the Universal Declaration on Bioethics and Human Rights on social responsibility – that the promotion of health for their people, together with social development, “is a central purpose of governments that all sectors of society share”. There are countries where traditional medicine encompasses those health practices which have been developed in the same social, cultural and environmental context in which they are used today. They are passed on from generation to generation in the particular context in which they are deeply embedded, even though the “traditional” aspect of the practices involved does not preclude the possibility of evolution and change. In other countries, such practices have been introduced only recently and are thus not part of their own tradition. In both cases, however, the crucial challenge to address remains that of recognizing and improving those, and only those, medical practices – regardless of the experience and context they stem from – which are the most suitable to protect, restore or promote health. The difference of approach in practices generates a need for regulation, particularly when they overlap in the same social context and come to be potential “competitors”.

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[3] *The World Medicines Situation 2011 – Traditional Medicines: Global Situation, Issues and Challenges*. Geneva, World Health Organization, 2011. p. 6-7

[4] Ibidem.

[5] Ibidem.

[6] Barnes PM, Bloom B, Nahin R. *Complementary and alternative medicine use among adults and children: United States 2007*. Hyattsville, MD, National Center for Health Statistics, 2008.

Countries also differ in the type of health systems they provide, which is linked with the extent to which traditional medicine is accepted and integrated into health care delivery. It is also worth underlining that analogous solutions can be found both in high and least developed countries, in countries where traditional practices are indigenous and others where they have been only recently imported.

- ***Integrated systems***

  In an integrated system, modern and traditional medicines are combined through medical education and practice, and together take responsibility for treating the population. In China, for example, this system was developed in the 1950s to mobilize all health care resources to meet national objectives for primary comprehensive healthcare. Chinese traditional medicine was thus integrated into the national health care system, providing appropriate training and putting emphasis on research. Today, traditional Chinese medicine is taught at local medical universities and colleges with a mixed curriculum. In Chinese traditional medical universities and colleges, their curriculum consists of 60% teaching in traditional medicine and 40% in modern medicine.

- ***Parallel systems***

  In a parallel system, traditional medicine is recognized as a distinct part of the health care provision. There is evidence that this pattern of integration looks to be more successful in the context of the Asian tradition and experience. In India, for example, the first step towards recognition of traditional medicine was the passing of the Indian Medicine Central Council Act in 1970 with a mandate to standardize training, establish accredited institutions for research and ensure good standards of training and practice in this type of medicine.

- ***Inclusive systems***

  In inclusive systems, traditional medicine is recognized, but its integration into health care is still incomplete. Traditional medicine might therefore not be available at all health care levels, specialized education might not be available at university level and regulation might be lacking or only partial. A large number of countries follow this system, in different regions and against different cultural backgrounds.

- ***Tolerant systems***

  In tolerant systems, only the modern medicine is recognized, while traditional medicines are not mentioned in national health programmes, which means that their existence and significance are virtually ignored and the official healthcare system exclusively relies on modern medicine. They are however tolerated by law, which adopts a sort of “laissez-faire” policy, which means that they are left to develop without State control. There is no registry, no licensing and no sanctioning of traditional medicine practitioners and research and training in this area is not promoted.

- ***Exclusive or monopolistic systems***

  In exclusive systems only modern medicine is considered appropriate and traditional medicine is either made explicitly illegal or it is institutionally repressed.

3. TRADITIONAL MEDICINE IN PRACTICE

The following overview of traditional medical practices, which follows UNESCO’s regional categorisation, is far from being exhaustive. However, it aims to give an idea of the type of practices falling under this category, their theoretical approach to health, the importance they have for populations relying on them and the relevant governments’ position and attitude regarding them.

3.1 Arab region

The dominant traditional medical system of the Arab world, also known as Islamic traditional medicine (which is also prevalent in other Islamic countries such as the Islamic Republic of Iran), is

a highly codified and systematized elaboration of the ancient Hippocratic method by Muslim physicians, herbalists, pharmacologists and chemists during the medieval period. Concepts, values and procedures of this medicine follow the precepts of the Quran and the Sunna, which establish which herbs, minerals or liquids are allowed and suitable for treatment. The Quran also contains precise information about the medicinal properties of plants, and reading specific verses is believed to have healing powers, as it is the case when such verses are read over water, honey, olive oil or other plants which are then to be taken by the patient. Therapies used in Islamic medicine range from the intake of herbal medication to phlebotomy (vein incision done in coordination with the Islamic lunar calendar) and spiritual practices such as praying. Transmission of knowledge in this tradition is done orally and on an individual basis, although some countries are today introducing traditional medicine into modern medical schools' curricula.

Other traditional health practices from the region, in particular in Maghreb countries, intermix Islamic and local popular beliefs. Here the human body is seen as a harmonious divine creation, highly exposed to the risk of being afflicted by illnesses. These illnesses are believed to be caused by the person's social relations or actions in connection with social or religious rules, and also by sorcerers' curses or the evil eye. Healers resort to divination to identify the cause of the illness as well as the identity of the particular spirit said to be involved in creating the illness. Therapies consist of herbal preparations combined with the performance of rituals aimed at appeasing the concerned deity or expelling the negative agent. Their knowledge is only orally passed on to selected persons.

Within this region, countries' commitment has focused on regulation of herbal medicines. A few countries have established policies, regulations and bodies to prove the efficacy of traditional medicinal teachings for preventing and treating illnesses and to highlight the relevance of including them in national health care delivery systems. Other countries have not translated the use of traditional medicine by their population into concrete political action, so that traditional medicine is not integrated in the national healthcare system and no national policies have been issued to frame its practice.

3.2 Africa

In Africa, traditional medicine is characterized by health theories inter-mingling the human with his social, natural, spiritual and cosmic environment. According to this holistic approach, disease is to be considered and dealt with as a phenomenon that appears when disharmony affects the vital powers governing the patient's health, which range from the most powerful deity to the smallest living organism. To restore harmony, the healer combines local plants and minerals – used both for their medicinal properties and their symbolic and spiritual significance – with ritual actions, and calls on his in-depth knowledge of the patient's kinship and social relations as well as locally shared cosmologies.

The major figures of traditional medicine in Africa are the diviner and the traditional healer. The diviner diagnoses the cause of an illness if a supernatural interaction is suspected. His tools are his wide knowledge of the village's kinship relations, social connections and potential current conflicts. The traditional healer chooses and applies appropriate remedies; he is usually a very powerful person with connections and respect throughout the local society, and with indirect political power deriving from his ability to control illness and the linked supernatural powers. The traditional healer's right and ability to heal are said to be gifts from God and ancestors, often recognized during childhood through specific deeds. Other widely called on practitioners of traditional medicine in African countries include midwives and bone-setters.

Considering the fact that the vast majority of the African population, which still shares in general the lowest level of life expectancy and health standards, uses traditional medicine as a primary if not the only one health care provider, various countries within the region are showing considerable interest in assessing its results in the context of their healthcare policies. According to a survey conducted by WHO, many African countries are promoting a scientific basis for traditional medicines by establishing national programmes, offices and research institutes. Data from 2007 indicates further development of the legislative and legal framework through the elaboration of national policies and regulations in various countries. Some countries, for example, have national

programmes in place and have adopted laws and regulations. On the other hand, other countries have so far undertaken little, if any, national action.

3.3 Asia and the Pacific

In Asia, traditional medicine has reached a very high level of acceptance, with some countries having a health system combining modern and traditional medicine and other countries where both types of medicines are considered on an equal basis but separately practiced. One of the characteristic of traditional medicine in this region is a high level of systematization, a practice embedded in a complex theoretical framework providing conceptual and therapeutic direction, and long histories of use and popularity often considered as further evidence for the efficacy of those medicines.

In China, medical practices such as acupuncture, moxibustion, herbal medicine, cupping or sets of exercises are said to be integrative interventions aiming at re-establishing harmony and equilibrium within the holistically viewed human body. Chinese traditional medicine is based on the following interlinked concepts: the yin/yang complementary aspects of the whole, the former being considered as a negative state associated with cold, dark, stillness and passivity, and the latter as a positive state associated with heat, light and vigour.; the five phases or elements (wood, fire, earth, metal and water) interacting both inter-promotionally and inter-restrictively; the three treasures of the human body (essence, *Qi* energy, mind/spirit) encompassing both tangible and intangible elements within the body; the *Zang/Fu* organs (solid/ hollow) creating, transporting and storing the essence as well as draff of water and grain; the meridians or channels linking together all the fundamental components and allowing a flow of energy and blood throughout the body. As a response to national plans aiming at providing comprehensive health care services for the large Chinese population, traditional medicine was scientifically approached and research on its methods emphasized. This enabled its full integration into all levels of healthcare provision. Today, 95% of Chinese hospitals have traditional medicine departments.

In India, Ayurveda (i.e. the “science of life”) is the country's most widely practised and acknowledged traditional medicine. Its practice is subdivided into general medicine, paediatrics, psychiatry, otolaryngology, surgery, toxicology, geriatrics and aphrodisiacs. Diseases are said to be connected with the psycho-physiologic and pathologic changes in the body caused by a loss of balance between three bio-energies. Therapies aim at restoring the lost balance by coordinating the patient's body, mind and consciousness. This is either done with purificatory treatments (applications of medical oils, purgations, enemas or bloodletting therapies) and pacificatory treatments (herbal therapies to strengthen the immune system, as well as rejuvenative therapies), which are complemented by yoga, meditation, prayers and chanting. In 2003 the Government of India established the AYUSH (Ayurveda, Yoga, Unani, Siddha & Homeopathy) Department, responsible for providing focused attention on the development of education, research, quality control and standardization of drugs for traditional medicine and for raising awareness about its relevance. Today, Ayurveda is practiced in around 3000 hospitals and 20 000 dispensaries in parallel with modern medicine. It has also dedicated health care and research centres, and is taught in about 400 undergraduate and postgraduate colleges.

In Japan, traditional medicine (called Kampo) is sustained by the country’s healthcare system and a majority of herbal preparations prescribed for Kampo medical treatments are refunded by medical insurance. In Indonesia, traditional medicine has been an integral part of curative and nursing care delivery since 1992. The country’s Health Law Act calls for development of those forms of traditional medicine which have proven to be safe and efficacious, while emphasising the need for supervision to ensure their safety and efficacy. In Malaysia, traditional medicine is also integrated into the national healthcare system, but using a self-regulatory approach: five umbrella organizations representing the most commonly used traditional medicines were established and are responsible for recognising, accrediting and registering their own practitioners as well as developing standardised training programmes, guidelines, standards and codes of ethics.

In Pacific countries traditional medicine has a different face. In countries like Australia, Samoa and New Zealand, traditional medicine has a little role, if any, in the national systems of health care delivery. In the South Pacific Islands, on the other hand, healing is intricately associated with two

fundamental Polynesian concepts: *tapu* (ritual prohibition and restriction) and *mana* (impersonal force or quality that resides in people, animals and inanimate objects), both related to the world of spirits. Mana is believed to be the divine power enabling traditional healers to fight illnesses which are considered to be of a supernatural origin. This power is ritually passed on from generation to generation within specific families. Traditional healers solely treat illnesses said to be endemic to this region (as opposed to illnesses said to have been imported by westerners), which are mainly spiritual in nature, but also physical injuries and metabolic and internal disorders. Spiritual ailments are considered to be the result of interaction with the spirit world, said to send out love, anger and cries to particular individuals in relation to their worldly and spiritual deeds. Healing includes herbal medicines, massages, rituals and incantations.

3.4 Latin America and the Caribbean

The field of traditional medicine in Latin America and the Caribbean is a mosaic of heterogeneous practices linked with the numerous indigenous groups living within the region, as well as the beliefs and practices of millions of migrants from all regions of the world. The region's landscape of traditional medicine is composed of rather isolated health systems alongside other mixed health traditions which have been strongly influenced by colonial European medicine.

Traditional medical practices in Latin American and the Caribbean are characterized by conceptions linking human health with the health of the ecosystem, both physical and spiritual. Health thus depends on the continuous quantitative and qualitative availability of resources from the ecosystem such as plants, animals and animal products, ritual objects, seasonal odours, sounds or landscapes. In the Andean region, for example, traditional healers believe that nature and the human body consist of a cycle of opposing moods (hot/cold and wet/dry), creating a pendulum rhythm between the two ends. Human and environmental health are both defined as the continuity of this cycle linked with the body, the mind, the nine levels of the soul and Earth, conceived as Mother.

Indigenous healers enjoy a powerful position within their local societies, and their knowledge, stemming from a centuries-old observation of nature, is often secret and either orally transmitted to selected or initiated people or considered as revealed by supernatural beings. The healers combine the use of a wide pharmacopeia with ritual practices to jointly restore bodily as well as spiritual imbalances originating from general harmful processes. Some plants are also ritually used, such as the coca or the tobacco leaf. The most widespread traditional medical specializations in the area are bone setting (dealing with dislocations, fractures and fissures), midwifery (prenatal, childbirth and postnatal services), herbal healing, rubbing (a type of massage aimed at increasing heat) and spiritual healing.

Due to various factors such as geographical and social distance, poverty, linguistic misunderstanding and cultural differences, a large majority of the indigenous population of this region, as it unfortunately happens in many other regions of the world, lacks access to modern health care.

3.5 Europe and North America

Modern medicine is the pillar of the European and North American healthcare systems. However, the population in these countries has also access to other traditional and alternative treatments. Thus, the growing interest in both non-indigenous traditions and knowledge and some very old remedies of local origin is even more significant. Suffice to think of herbalism and its complex pharmacopeia, containing a wide variety of medicines made from leaves, herbs, roots, barks and other vegetal and mineral substances. To uphold this knowledge many herbal practitioners' associations have been founded in countries such as the United Kingdom, Ireland and Denmark, and have in 1993 joined the European Herbal and Traditional Medicine Practitioners Association, which aims at fostering unity, raising standards of training and practice within the profession of herbalism and striving for its official recognition and legalization throughout the European Union.

European governments have been very active in establishing regulations for ensuring the safety, quality and efficacy of herbal medicines available in their countries. The Traditional Herbal

Medicinal Products Directive (THMPD), adopted in 2004 by the European Union, imposed pharmaceutical registration of medicinal herbs with a view to prohibiting non-registered products from 2011 onwards. Since registration is subject to a series of eligibility and technical challenges, as well as high costs, this Directive has considerably reduced the amount of herbal medicines available on the European market and thus the possibility of local traditional health practitioners using them for their patients. The implementation of this Directive is, however, left to the discretion of each country, which implies variation as it depends on each country's definition of herbal medicine.

Apart from the regulation of herbal medicines, a coherent and comprehensive system of policies and laws regulating the practices of traditional medicine, including those coming from other regions of the world and whose dissemination is improving more and more, is still missing. In most West-European countries the practice of traditional medicine by practitioners not educated and licensed in modern medicine by publicly recognized institutions is either illegal (cf. France, Luxembourg), ignored by law (cf. Ireland, Malta, United Kingdom) or excluded as a possibility (Italian Guidelines adopted by the National Federation of the Orders of Physicians in 2009). Other countries such as Hungary, Israel, Norway, the Russian Federation and Turkey have been active in establishing and elaborating some legal tools and setting down precise rules for the training of practitioners, for the conditions and mode of use of their therapies and for the delineation of authorized scope of their practice.

In the United States and Canada, modern medicine is also the primary and institutionally established health care provision, but some room has been made for traditional medicine. It is important to underline that in this part of the world traditional medical practices which are embedded in the culture and life of the original population of the continent such as those of the local American Indians, the First Nations, the Inuit and the Métis communities still survive. A common characteristic of these practices is a holistic approach to health based on the inter-relationship between the physical, mental, spiritual and emotional aspects seen as integral parts of individual and community health. These interrelationships are in turn related to environmental and also social determinants of health, as for example education, housing, economic status or social capital. In treating patients, traditional healers use an array of therapies, including herbal preparations, ritual purification, purging, blood cleaning, burning of certain herbs, as well as chanting and prayers. The healers' powers are said to be either inherited through their lineage or gifted by a guiding spirit after having been "initiated", consisting in suffering and recovering from a serious illness. An important element in traditional medicine of the Canadian First Nations, Inuit and Métis is the fact that every person is from prior to his birth until after his death said to be connected with a specific spirit, identified with a name and a colour. Communicating with this spirit is believed to be the only way to know the fundamental source of a person's illness and the appropriate way to restore health.

North American traditional medicines are not in the public domain and are protected by specific communities who have established their own health care facilities centred on their ancestral medical heritage. Action is, however, also taken at government level. In Canada, a range of national, provincial and territorial health policies, strategies and initiatives aim at promoting and increasing access to traditional medicine for indigenous communities, while ensuring access to modern medicine to all those who need it or want it. In the United States of America the practice of traditional medicine has become legal after the passing of the American Indian Religious Freedom Act in 1978, which gave to indigenous communities the right to exercise their own religions and attendant practices, including medical practices. Today several medical schools train in American Indian traditional medicine and a few hospitals call on traditional healers to supplement the treatment of indigenous patients.

4. ETHICAL AND POLITICAL CHALLENGES

The possible benefits and potential disadvantages of traditional medicine appear to be manifold, but a proper, reliable assessment of either of these is a challenge difficult to address. Modern medicine and traditional medicine are not based on the same worldviews. In many parts of the world, traditional consideration of the cause of disease is based on a double causality principle,

that is, disease is said to be at the same time due to natural and supernatural/spiritual causes. And health is in a majority of cases considered as a state of equilibrium between various elements and hints at the interconnectedness between the human and his social, natural and supernatural environment.

This very diverse conception surrounding health shows that definitions of health and illness can differ considerably, which entails that there might also be differing definitions of a treatment's efficacy. From the point of view of modern medicine the problem is also to decide what place to give to the non-scientific aspects of traditional medicines which are said to play an intrinsic part in the healing process. Double blind trials, for example, are meant to show the particular effect of a product in the body by discarding what is called the "placebo effect", i.e. by excluding the interference of psychological and other external effects. But traditional medicines consider this interference to be of the utmost importance.

The biomedical translation of indigenous disease concepts might be a challenging process, but it is the most promising way to boost a fruitful dialogue between modern and traditional medicine and to get a deeper insight into traditional treatments based on their own cultural premises. It would also have an important value in a diversity of applications, ranging from the screening of medicinal plants for bioactivity to health provision initiatives aimed at indigenous communities. In any case, the decisive step to make is that of enabling people to look at possible alternatives on the basis of fairly distributed conditions of access to different therapeutic options, awareness of the attested outcomes of such options and protection from whatever excessive risk entailed in the treatment.

4.1 Potential benefits and advantages

The broad use of traditional medicine may stem from the lack of access to modern medicine, but also from a genuine demand, as can be seen from the fact that even in industrialized countries about half of the population also uses forms of medicines other than the modern one. The reasons for this demand are manifold:

- ***Availability and proximity***

  In many developing countries, traditional health practitioners by far outnumber physicians practising modern medicine, who are unevenly spread over the territory and are mainly to be found in cities. In Africa, there is up to 1 traditional healer per 200 inhabitants, while only 1 physician practising modern medicine is available for up to 50,000 inhabitants in some regions. In other parts of the world, the difference in ratio is less important but still significant. The easy accessibility of herbal medicines in rural areas is also responsible for their preference for curing many illnesses. Considering this availability of traditional health practitioners versus the scarcity of physicians practising modern medicine, the former are the *de facto* primary health care providers in rural areas.

  The geographical and social proximity of traditional healers with their patients is also one of the reasons for their selection as supervisors and intermediaries for programmes locally implemented, which combine notions and practices of modern medicine. In East and Sub-Saharan Africa, traditional health practitioners are, for instance, involved in providing spiritual healing and complementary herbal treatments and in giving psychological, social and practical support to the patients' families. Traditional healers are also reported to make effective contributions to promoting the willingness of patients to stick to long-term treatments.

- ***Affordability***

  In many developing countries traditional medicine is the only affordable health care for the poorer populations for whom modern treatments are far beyond their means. WHO, in its Report on *Traditional Medicine Strategy 2002-2005*, pointed out that in Ghana and Kenya a course of modern antimalarial treatment costs nearly as much as per-capita out-of-pocket health expenditure for an entire year[7]. But studies have shown that malaria can also be

[7] *WHO Traditional medicine strategy 2002–2005*. Geneva, World Health Organization, 2002 (WHO/EDM/TRM/2002.1). Available at: http://apps.who.int/medicinedocs/en/d/Js2297e/

effectively treated with easily available and cheap herbal medicines which can often be defrayed in kind and/or according to the patient's means. Of course, the crucial issue remains that of the affordability of medicines and treatments of proven effectiveness. Governments are called upon to ensure a true choice.

- ***Cultural familiarity and acceptability***

  Practitioners of traditional medicine live in the same cultural context as their patients and share with them the same global perspective about the human organism in connection with its broader environment and the same definitions of health and illness. They thus speak "the same language" as the populations and call on the same knowledge connected with health. Traditional health practitioners, in particular in African countries, also fulfil additional health sector roles such as caregivers, health educators, family counsellors, community therapists, and even wider community functions such as priests, ritual specialists, diviners, teachers, moral and ethical guides and community leaders. This mutual knowledge is also key to the readiness of local populations to consult traditional practitioners and is also instrumental in the acceptation of diagnosis and treatment by patients and their trust in the capacity and knowledge of the treating practitioner.

- ***Efficacy for treating particular ailments***

  Traditional medicine is in many countries the preferred treatment for mental disorders connected with psychosocial problems. Chinese and Indian traditional medicines are also said to have had continuous positive results in treating chronic medical conditions such as rheumatism, metabolic disorders, neurological anomalies or life style disorders. Encouraging examples from India and Africa also show how traditional medicines have been successfully used to achieve complete relief from symptoms and signs such as abdominal pains, diarrhoea and jaundice, as well as to significantly decrease the incidence of malaria by the intake of herbal preventive medicines.

- ***Holistic and person-oriented approach***

  Traditional medicine has a holistic approach to health and illness. It allows the individual to be viewed as a whole, taking into account not only the patient's body and mind, but also the person within the family unit, the society and the cultural surroundings. Traditional medical practitioners are therefore helpful in areas such as treatment of anxieties, depressions and the consideration of psychosocial problems underlying mental disorders. Traditional health practitioners provide patient-centred and personalized health-care which is tailored to meet the needs and expectations of the patient.

- ***Protection of biodiversity***

  Herbal medicines are a major part of traditional medical therapies, and traditional health practitioners rely on and transmit an in-depth knowledge about the medicinal properties of plants and minerals. Their knowledge and dependence on the availability of plants make them best protectors of those biological resources which are instrumental in ensuring the sustainability of their practice.

These arguments in favour of traditional medicine ought to be carefully scrutinized. Poverty and illiteracy are always factors in possible discrimination. Consequently, availability and affordability of a treatment cannot be considered as an "advantage" whenever they correspond to the impossibility of having access to treatments of better quality. Cultural familiarity and acceptability themselves cannot be a substitute for efficacy, although they contribute to "complement" it in the very sense of the definition of health as "a state of complete physical, mental and social well-being" provided by WHO. Moral dilemmas are often triggered by possibilities that look promising and at the same time difficult to accept with reference to the values and habits we are most familiar with. In the end, we are talking about medicine. This is why the argument relying on respect for cultural diversity cannot be isolated from the argument of efficacy. Vice versa, the person-oriented approach and the principle of protection of biodiversity should not be considered "alternative" to modern medicine; rather it should be integrated into it as essential benchmarks of its practice.

4.2 Crucial issues to be addressed

Article 12 of the Universal Declaration on Bioethics and Human Rights underscores both the *importance* and the *limits* of cultural diversity and pluralism. They deserve due regard, but cannot be invoked "to infringe upon human dignity, human rights and fundamental freedoms". These limits are to be set also with regard to other domains of human experience. Freedom of religion, for example, could not be used to justify ritual violence against women or sexual minorities. Respect for pluralism cannot be called in aid to support practices of crude exploitation and discrimination. Article 12 is included in the section devoted to the "principles". Nonetheless, it makes it explicit that cultural diversity cannot be invoked to infringe "upon the principles set out in this Declaration, nor to limit their scope". It is not to be considered as an unintentional contradiction. This clarification entails awareness that the principles set out in the Declaration, no matter how important each of them may be, may sometimes clash with each other. In such a case, a balance or even a prioritization becomes unavoidable.

A correct evaluation of benefit and harm (Art. 4), the adequate information of the person concerned, so that the principles of autonomy and prior, free and informed consent be respected (Art. 5 and 6), the right to have access to quality health care and essential medicines (Art. 14), and the sharing of benefits (Art. 15); all are considered as essential components of the commitment to promoting the enjoyment of the highest attainable standard of health for every human being, and are the most relevant issues to be addressed. They are the cornerstone of whatever practice claiming to be recognized as "medicine" and consequently have become the focal points of the most widespread debates and worries about *traditional* medicine. The principles that cannot be infringed upon by calling on the principle of respect for cultural diversity and pluralism underscore possible areas of conflict.

4.2.1 Safety

One of the main challenges of traditional medical practices is often the difficulty in distinguishing between real traditional healers and so-called charlatans who can physically and psychologically harm those patients they claim to treat. These pseudo-healers are actually a heavy burden on the reputation of traditional medicine as a whole.

Loyalty to tradition does not give practitioners the right to resort to the use of dangerous and harmful practices. Potential harms also come from misusing the herbal components. The common misconception about the absence of side effects and toxicity of natural products can lead to uncontrolled and exaggerated intake resulting in severe intoxication and acute health problems. This misconception involves less, as well as highly developed, countries, where people often resort to "natural" products without appropriate awareness and information about the associated risks, especially in the case of overuse.

4.2.2 Assessment of efficacy and quality

The effect of traditional therapies may be more difficult to assess than it is in the case of modern medicine, which is also exposed to the risk of false hopes and extraordinary and yet impossible promises. How, for example, is it possible to test the effect of a therapy supposed to act on the equilibrium between physical, mental, environmental and cosmic elements using the strict requirements of scientific testing? In the case of herbal products, scientific testing is certainly possible, but such an evaluation may require a long time and incur high costs, without the likelihood of a return on the investment. Plants are more difficult to patent than drugs. Once efficacy has been proved, who could prevent another person from growing the same plant? And new problems are likely to stem from this. The active constituents of medicinal plants vary according to the environment (type of soil and climate), the time of harvesting, the part of the plant used, the way they are stored, and so on.

Additionally, to evaluate the training and knowledge of traditional practitioners, there must first be a great effort to systematize this knowledge. Apart from a few Asian countries where training of practitioners has been or is on the verge of being institutionalized, a majority of traditional health practitioners are still being trained in traditional ways. Their knowledge is orally passed on to them

and within healing families or lineages. Their training is thus highly informal and the quality of their knowledge and their expertise are not sanctioned and/or verified according to standardised procedures.

4.2.3 Non-discrimination

Traditional health practitioners are in many areas the first referent for populations who cannot afford or do not have access to modern health care facilities. The commitment to defending tradition and cultural identity, which is a right in itself, cannot, however, be distorted to prevent people from receiving correct and adequate information about the cause of their illness and consequently from receiving an effective treatment.

The principles of autonomy and consent have to be applied with due consideration of the peculiarity of the contexts in which illness itself is perceived as a family and group problem and the responsibility for decisions is not just that of the individual. In the case of traditional spiritual practice the situation is more complicated, since there is a risk of breaking the symbolic relational bond, which is considered as an essential element of the therapeutic relationship itself. However, this is not intended to allow practitioners to keep patients from receiving life-saving treatment by claiming to have effective, even miraculous means to cure serious and acute illnesses or by giving spiritual diagnosis calling on local beliefs to convince patients of the necessity of following recommended traditional therapies. A case study in South Africa has reported the case of a traditional hospital where AIDS was identified as a consequence of ancestral wrath due to non-performance of an important ritual and spirit possession, to be treated with offerings and exorcisms, which condemned patients to die without ever being offered or receiving modern life-prolonging and relieving treatments.

The best means of diagnosis, therapy and prevention, which are not the exclusive preserve of modern medicine, should be made available to every patient in every country and in every cultural context. It would be unacceptable to give rise to a two-tiered health care system: a more accessible and cheaper one for social groups of modest means and another for the rich. Traditional and modern medicine can coexist if bridges are built between the two. If a traditional treatment is effective, it should be made available worldwide. Respect for cultural diversity, and the fact that in many circumstances the poor do not ask for what they simply do not know to be a viable alternative, cannot become an alibi for disengagement and for loosening the bonds of justice and solidarity, in a world where life expectancy ranges from more than 80 to less than 50 years.

It is precisely the potential of traditional practices to improve health conditions and effectively treat diseases far away from the context in which they were originally ingrained that triggers new risks of exploitation, which may “complement” the habits and policies of discrimination. A great deal of modern medicines derives from medicinal plants, either directly or indirectly through the improvement of traditional knowledge by means of advanced technology. In most cases, no recognition or sharing of benefits and revenues are guaranteed to the populations whose practitioners have been using these plants for centuries and may eventually even be offered a patented product for payment.

4.2.4 Biopiracy

The privatization and exclusivity secured through the patenting of plant derivatives that have been known for a long time in developing countries, which often lack the possibility of developing this traditional knowledge commercially, is a quite widespread practice. When it takes place without any compensation for indigenous people and/or without their permission, this practice deserves to be called “biopiracy”. The case of the neem tree or margousier provides a perfect illustration of this risk: the plant, known in India for its antifungal properties for at least 2000 years, was the subject of a patent application filed at the European Patent Office (EPO). It was only after a five-year-long battle that the patent rights were revoked on the ground of prior traditional Indian knowledge, rejecting the argument backed by the pharmaceutical company involved, that knowledge should be considered as “prior art” and therefore preclude a patent only if it has been made public in some scientific journal.

Another major problem arising from commercial firms' renewed interest in medicinal plants stems from possible plundering of raw materials required to manufacture medicines or other natural health products. If this situation is not regulated and controlled, endangered species are liable to become extinct and resources and natural habitats may be destroyed. International and national standards often do not suffice to protect genetic biodiversity resources and traditional knowledge.

5. COURSES OF ACTION

The differences between modern and traditional medicine are not evidence of incompatibility. They are rather assets that can lead to complementarity, even synergy, for the benefit of the people. Yet the lack of systematized knowledge about benefits and harms, the need for sound policies to seek a guarantee in the safety, efficacy and quality of products and therapies and also the more general reluctance to give a more official status to a medicine that is not fully understood and is still widely equated with superstition and magic, have in many countries hindered fruitful actions in this direction. The main components of these actions, however, are easy to describe.

5.1 Traditional medicine as medicine

The "Beijing Declaration" is the key outcome of the first WHO Congress on traditional medicine, held on the occasion of the 60th anniversary of the organization and the 30th anniversary of the Alma-Ata Declaration, which acknowledged for the first time the role of traditional medicine in health care at the international level. The Declaration clearly reaffirms both the obligation to view these practices as something that "should be respected, preserved, promoted and communicated widely and appropriately based on the circumstances in each country" and the responsibility of each government for the health of its people, calling therefore on all states "to ensure appropriate, safe and effective use of traditional medicine" through adequate policies, regulations and standards.

Ensuring the safety, efficacy and quality of traditional medicine is a priority, inasmuch as it demands to be respected, preserved and promoted *as a medicine*. At the same time, governments are entrusted with protecting the population they are responsible for against risky practices, abuses, and charlatanry. The task of assessing the outcomes of traditional medicine is unavoidable. Besides legislation, and even before it, it is important that the scientific community feels itself committed to develop procedures to properly evaluate these practices. It is very important that such evaluation could take place through a constant dialogue with traditional healers, people conducting research in traditional medicine, experts and representatives of the cultures involved. We are called on to share a responsibility and not just to impose a set of practices and a cultural framework.

Such procedures may be difficult and expensive to establish. Suffice it to look at herbal medicines, which often contain several different chemical constituents and whose efficacy has long been ascertained as a matter of fact. The entry on traditional medicine in the WHO Report on *The World Medicines Situation 2011* suggests that this issue should be addressed by a more flexible, though equally rigorous, method, already established in some legislation and guidelines. The *history* of use, coupled with a consistent tradition of observation and field-testing, providing evidence of uneventful use of a substance and plausible therapeutic effects, "can supplement verification of safety and, potentially, add weight to claims of efficacy". In any case, such verification remains absolutely necessary and the scientific community ought to be rigorous in reporting not only harmful but also placebo treatments, as it applies also to conventional, allopathic or western medicine.

Even though traditional practices are deeply engrained in specific cultures, a global strategy is necessary. A global and regularly updated database for information is advisable, as well as global forums for exchanging experiences and agreeing on procedures. It is also important to underscore that this kind of medicine is not to be excluded from the domain of research and the task of further innovation because of its centuries-long history. As far as traditional medicine is to be taken seriously as medicine, capacity-building is also a challenge.

5.2 Integration through regulation

Appropriate regulation of traditional medicine is an essential tool in integrating it into the broad scope of health care systems and should be pursued both at the domestic and the international level. The WHO Global Survey conducted in 2001 showed that policy and regulatory measures implemented at national levels have been manifold though not always consistent. Six years later, WHO reported that 110 out of its 193 Member States had developed some kind of policy in connection with traditional medicine. Countries like China, India and South Africa offer contemporary examples of a wide-ranging approach, whereas herbal medicines have been regulated as to their registration and use in a large number of countries.

There are several legal and research oriented measures that can be used to establish a framework for traditional medicine. Countries can establish national policies to make provision for the creation of laws and regulations, which in turn allow the establishment of legal regulation and “legal machinery” for the practice of traditional medicine. Ministries of Health, or other national or local political bodies, can also implement programmes aimed at achieving the objectives set out in those policies, especially by supporting specialized research institutions. Legislative enforcement of safe use is part of the responsibility of each government for the health of their people, as is the provision of institutional and financial support for initiatives aimed at disseminating correct information and scientific knowledge.

This effort has to be strengthened at the international level. Global, or at least regional, networks of regulatory authorities should be further promoted and enhanced. The *International Regulatory Cooperation for Herbal Medicine*, which was established in 2006, is an example of a shared commitment to safeguard and promote public health in the most lucrative domain of traditional medicine. It is essential that such international experiences of cooperation be predicated on respect for local cultures and sensibilities, avoiding any pressure stemming either from special interests or economic power. The agenda should be written down with the contribution of all of the different stakeholders and regulatory bodies and committees should always include, on the basis of equal respect, practitioners and experts in traditional medicine.

Suspicion and distrust are often the consequence of the lack of precision in definitions and regulations. Patients and potential consumers, just trawling the internet, can easily find treatments that are allowed and paid for by the national health service in some countries and unlawful in others, as well as herbal products that are considered either drugs or only dietary supplements - even merely foodstuffs. This disparity should be overcome as much as possible.

5.3 Benchmarks for education and training

The integration of different types of “medicine” in one and the same system of health care is a challenge for countries in which so called modern medicine is dominant. It is essential that physicians trained in modern medicine learn about indigenous peoples’ culture and respect their beliefs and customs, besides receiving more precise information about, and better insight into, traditional drugs and treatments. This is also important in order to protect users from potential risks and possible harm deriving from simultaneous use of traditional and modern medicine. At the same time, traditional practitioners must be trained in modern medicine, so that collaboration and actual complementarity be possible within the health system.

The idea of elucidating and disseminating at the international level benchmarks for training in traditional medicine which have been developed thanks to the cooperation of practitioners and carefully scrutinized is a very promising one. This was, for example, the starting consideration for the Quadrennial Cooperation Plan signed between the Regional Government of Lombardy (Italy) and WHO, whose outcome was the publication in 2010 of benchmark documents for selected widely used traditional, complementary and alternative medicines: Ayurveda, Naturopathy, Nuad Thai, Osteopathy, Traditional Chinese Medicine, Tuina, Unani Medicine.

These documents were intended to address some issues which are largely considered as priorities in enhancing fruitful linkages between traditional and modern medicine: a) support countries in establishing systems for the qualification and accreditation of practitioners; b) help practitioners themselves to upgrade their knowledge and skills through collaboration with other providers of

health care; c) facilitate better communication; d) support integration of traditional medicine into national health systems. Such tools should be improved, with the aim not only of better protecting patients and consumers and widening the scope for their autonomous choice, but also of boosting mutual understanding of cultures.

5.4 Tradition as a choice and not as a destiny

This is probably the most important point to make within the framework of human rights. The *Universal Declaration on Bioethics and Human Rights* clearly states that the right to the highest attainable standard of health cannot be predicated on characteristics such as economic, social, or cultural origin like religion and political belief (Art. 14). This is perfectly consistent with the obligation of respect for cultural diversity and pluralism inasmuch, and only inasmuch, as such respect does not have as its consequence a substantial infringement upon human dignity, human rights and fundamental freedoms (Art. 12).

The contribution of traditional medicine to improving health can be important. Nevertheless, its easy accessibility and affordability in the least developed countries too often covers up the inability to deliver more effective therapies and medicines to people who suffer and die from diseases which are successfully treatable, and actually treated, in other countries of the world. Traditional medicine should contribute on its own merits to advance the highest standard of health care and not perpetuate multiple standards and faults of inequality. Strengthening basic infrastructures and services, as well as education and the quest for excellence within the local scientific communities, traditional practitioners, governments and international institutions, may help turn traditional practices into the object of a real choice worldwide.

The experiences in sub-Saharan countries of non-governmental organizations which aim to achieve excellence in diagnostics and treatments and offer the western standard to fight against HIV infection have provided unquestionable evidence, not only of the clear ability of these populations to adapt themselves to strict prescriptions and rules of life, but first and foremost of their readiness to shift from culturally friendly but ineffective treatments to more effective though foreigner ones. In the end, “competition” between different options on the footing of sound information and real accessibility and affordability is the best incentive to reduce or eradicate bad practices.

5.5 Protection from exploitation

The *Convention on Biological Diversity*, which entered into force in 1993 and has been ratified by almost all sovereign States of the world, established some important rules aimed at protecting developing countries from the risk of exploitation in terms of their traditional knowledge and natural resources. Informed consent is required for researchers or multinational companies to have access to such resources and the obligation to share results and benefits resulting therefrom is made explicit.

Article 8, in particular, states the principle of “in-situ conservation” and calls upon each Contracting Party to “respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices”. The *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their utilization* was adopted in 2010 as a supplementary agreement to the Convention, with the aim of further underpinning legal certainty and transparency about the necessity both of “establishing more predictable conditions for access to genetic resources” and of “helping to ensure benefit-sharing”, so that sustainable use, as well as the contribution of biodiversity to development and human well-being, can be enhanced.

These statements are important from two perspectives. On the one hand, it is recognized that the principle of informed consent is also to apply to the link between individuals and communities and the environment in which they live, besides the autonomy of individuals with respect to what

happens to their body: traditional knowledge is a kind of “property” which deserves the utmost respect. On the other hand, it is affirmed that when health protection is at stake intellectual property rights cannot take priority. Governments are called upon to make their own decisions and cooperate along the line drawn in the *Doha Declaration on the Trips Agreement and Public Health* of 2001, which acknowledged that some “flexibility” was unavoidable in the face of “the gravity of the public health problems afflicting many developing and least-developed countries”.

5.6 A pluralistic concept of health

Traditional medicine is not merely a matter of diagnosis and treatment: it entails a more complex perspective on life, death, health and illness and a different view of the patient, the doctor and the doctor-patient relationship, as well as individual-community relations, health services and risk factors. Its holistic approach enhances the patient’s involvement and is therefore likely to be more appreciated in those circumstances where either an individual’s well-being is affected by an uneasiness which is psychologically, socially or culturally determined or where the development of disease requires special attention not just for “medical” care, as may be the case, for example, with terminal diseases.

The role of traditional medicine should be looked at in terms of possible “complementarity” rather than as being an “alternative”. Modern medicine cannot be supplanted and can reproduce and implement many of the positive effects of traditional practices by its own means, as happens, for example, when an active constituent contained in a plant is isolated, manipulated and reproduced in a laboratory and eventually purchased as a coloured tablet in a blister. Nevertheless, what is enshrined in the culture individuals and communities belong to is an essential component of their well-being and something they can choose to prioritise in order to strengthen their capacity to cope with suffering and disease.

The local communities who have transmitted traditional practices for generations, and have an in-depth knowledge of the rationale for their use, are in the best position to contribute to the sustainable and informed use of biological resources, as well as protecting their own well-being and identity. At the same time, governments and the international community ought to consider everyone’s access to the unquestionable and unprecedented opportunities offered by modern medicine as a moral and political obligation. This, however, should not automatically devolve into a judgment on different cultures and attitudes towards life and death.

6 CONCLUSIONS

Traditional medicine may be a precious resource, provided its place in respect of modern medicine can be clarified and their contraposition overcome. The commitment to promote health and access to safe, effective and quality health care for every human being relies on the same idea of medicine, understood as the system of diagnostic and therapeutic tools progressively made available to fight against disease, prolong life and improve its quality and the well-being of people. The fact that knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures may be used to fulfill these tasks, is not what is primarily relevant. Empowerment of populations will help individuals to choose the best treatment offered by both systems of medicine, and such a choice should always be available. The highest attainable standard of health has long since been recognized as a fundamental human right. Therefore, nothing but the best practice of medicine can be accepted as a standard.

Traditional medicine can contribute, and has actually contributed, to establishing and disseminating these best practices in various ways. Through centuries-long herbal knowledge, it has made it possible to treat or ameliorate many illnesses and paved the way to the discovery of new drugs. Through its holistic approach, it underscores the broad and values-oriented dimension of well-being that modern medicine itself should never dismiss. However, respect for cultural differences cannot be distorted to justify the exclusion of some peoples from sharing the benefits of scientific progress nor for giving up the responsibility to provide adequate information about the outcomes of different treatments. Governments are called upon to adopt appropriate legislations for assessing, licensing and accrediting traditional practices and drugs and to cooperate to strengthen

internationally agreed regulations. Governments and the academia are also called upon to study, elaborate and adopt appropriate educational methods and tools for the teaching of traditional practices, and to strengthen communication, capacities and solidarity. International agencies, non-governmental organizations and research institutions on modern and traditional medicines are important pillars of this commitment, and collaboration should be encouraged and improved.